

REMARKS

The above-identified patent application has been amended and Applicants respectfully request the Examiner to reconsider and again examine the claims as amended.

Claims 1-38 are pending in the application. Claims 1-13 are rejected. Claims 1-13 are amended herein. Claims 14-38 are new.

The Rejections under 35 U.S.C. §102(b)

The Examiner rejects Claims 1-13 under 35 U.S.C. §102(b) as being anticipated by Hancock (U.S. Patent number 5,179,377).

Applicants submit that amended Claim 1 is patentably distinct over Hancock, since the cited reference neither describes nor suggests:

...first means for receiving location information regarding the object, the location information including a first coordinate  $x$ , a second coordinate  $y$ , and a third coordinate  $z$ , wherein the third coordinate  $z$  represents *an absolute altitude of the object relative to a geographic reference*;

second means for correlating the first and second coordinates  $(x,y)$  with a location of an icon in two-dimensional space in a display; and

third means for correlating the third coordinate  $z$  with a characteristic of the icon, wherein the characteristic of the icon changes in response to changes in the third coordinate  $z$ , and *wherein the relationship between the characteristic of the icon which changes and the third coordinate  $z$  is substantially monotonic*,

as set forth in Claim 1.

With this particular arrangement, the present invention provides a display, for example, to an air traffic controller, for which the air traffic controller can readily identify aircraft altitude.

In contrast, Hancock, at page 4, lines 2-3, in describing Fig. 2, discloses a traffic situation awareness display in a craft, which is described to be an aircraft, and for which "...the size of aircraft symbol 42, 44 or 50 has a size related to *altitude differential* from own aircraft represented by symbol 22... ." Applicants understand Hancock to describe, in conjunction with

Fig. 2, a display for which icons associated with aircraft displaced a particular amount both above and below own aircraft are shown having the same size. Claim 1, however, calls for an icon associated with an object wherein the claimed characteristic of said icon has a monotonic relationship with the absolute altitude of the object.

In view of the above, Applicants submit that Claim 1 is patentably distinct over Hancock.

Claims 1-8 depend from and thus include the limitations of Claim 1. Thus, Applicants submit that Claims 1-8 are patentably distinct over the cited reference at least for the reasons discussed above in conjunction with Claim 1.

Applicants submit that amended Claim 9 is patentably distinct over Hancock, since the cited reference neither describes nor suggests:

...first means for receiving location information regarding the object, the location information including a first coordinate *x*, a second coordinate *y*, and a third coordinate *z*, wherein the third coordinate *z* represents an absolute altitude of the object relative to a geographic reference;

second means for correlating the first and second coordinates (*x,y*) with a location of an icon in a display; and

third means for correlating the third coordinate *z* with at least one of size, color, grayscale, intensity, and shape of the icon, wherein the at least one of the size, the color, the grayscale, the intensity, and the shape of the icon changes in response to changes in the third coordinate *z*, and wherein the relationship between the at least one of the size, the color, the grayscale, the intensity, and the shape of the icon and the third coordinate *z* is substantially monotonic,

as set forth in Claim 9.

Applicants submit that amended Claim 10 is patentably distinct over Hancock, since the cited reference neither describes nor suggests:

... first means for receiving location information regarding the object, the location information including a first coordinate *x*, a second coordinate *y*, and a third coordinate *z*, wherein the third coordinate *z* represents an absolute altitude of the object relative to a geographic reference;

second means for correlating the first and second coordinates (*x,y*) with a location of an icon in a display; and

third means for correlating the third coordinate  $z$  with a selected one of size, color, grayscale, intensity, and shape of the icon, wherein the selected one of the size, the color, the grayscale, the intensity, and the shape of the icon changes in response to changes in the third coordinate  $z$ , and wherein the relationship between the selected one of the size, the color, the grayscale, the intensity, and the shape of the icon and the third coordinate  $z$  is substantially monotonic,

as set forth in Claim 10.

Applicants submit that amended Claim 11 is patentably distinct over Hancock, since the cited reference neither describes nor suggests:

...first means for receiving location information regarding the object, the location information including a first coordinate  $x$ , a second coordinate  $y$ , and a third coordinate  $z$ , wherein the third coordinate  $z$  represents an absolute altitude of the object relative to a geographic reference;

second means for correlating the first and second coordinates  $(x,y)$  with a location of an icon in a display; and

third means for correlating the third coordinate  $z$  with two or more of size, color, grayscale, intensity, and shape of the icon, wherein the two or more of the size, the color, the grayscale, the intensity, and the shape of the icon change in response to changes in the third coordinate  $z$ , and wherein the relationship between at least one of the two or more of the size, the color, the grayscale, the intensity, and the shape of the icon and the third coordinate  $z$  is substantially monotonic,

as set forth in Claim 11.

Applicants submit that amended Claim 12 is patentably distinct over Hancock, since the cited reference neither describes nor suggests:

...a receiver for receiving latitude, longitude, and altitude information, wherein the altitude information corresponds to an absolute altitude of the aircraft relative to a geographic reference;

a display; and

a processor to convert the altitude information to an icon having an icon characteristic, and to place the icon at coordinates corresponding to the latitude and longitude in said display, wherein the characteristic of the icon changes in response to changes in the altitude, wherein the relationship between the icon characteristic and the altitude is substantially monotonic,

as set forth in Claim 12.

Applicants submit that amended Claim 13 is patentably distinct over Hancock, since the cited reference neither describes nor suggests:

...receiving location information regarding the object, the location information including a first coordinate  $x$ , a second coordinate  $y$ , and a third coordinate  $z$ , wherein the third coordinate  $z$  represents an absolute altitude of the object relative to a geographic reference;  
correlating the first and second coordinates  $(x,y)$  with a location of an icon in a display; and  
correlating the third coordinate  $z$  with a characteristic of the icon, wherein the icon characteristic changes in response to changes in the third coordinate  $z$ , and wherein the relationship between the icon characteristic and the third coordinate  $z$  is substantially monotonic,

as set forth in Claim 13.

In view of the above, Applicants submit that the rejection of Claims 1-13 under 35 U.S.C. §102(b) should be removed.

Claims 14-38 are new in the application. Support for the new claims can be found throughout the specification, and therefore, Applicants submit that the new claims do not include new matter.

New Claims 14-22 depend from Claim 1, either directly or indirectly, and thus include the limitations of Claim 1. Therefore, Applicants submit that new Claims 14-22 are allowable over the cited references of record in this case at least for the reasons discussed above in conjunction with Claim 1. New Claims 23-24 depend from and thus include the limitations of Claim 12. Therefore, Applicants submit that new Claims 23-24 are allowable over the cited references of record in this case at least for the reasons discussed above in conjunction with Claim 12. New Claims 25-38 depend from and thus include the limitations of Claim 13. Therefore, Applicants submit that new Claims 25-38 are allowable over the cited references of record in this case at least for the reasons discussed above in conjunction with Claim 13. Consideration of new Claims 14-38 is respectfully requested.

In view of the above Amendment and Remarks, Applicants submit that Claims 1-38 and the entire case are in condition for allowance and should be sent to issue and such action is respectfully requested.


The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845, including but not limited to, any charges for extensions of time under 37 C.F.R. §1.136.

Dated: March 28, 2005

Respectfully submitted,

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